Title (en)

WIRELESS COMMUNICATION CONTROL CHANNEL SYSTEM AND METHOD

Title (de)

STEUERKANALSYSTEM UND VERFAHREN FÜR DRAHTLOSE KOMMUNIKATION

Title (fr)

SYSTÈME ET PROCÉDÉ POUR CANAL DE COMMANDE DE COMMUNICATION SANS FIL

Publication

EP 2761959 A1 20140806 (EN)

Application

EP 12836982 A 20120929

Priority

- US 201161540678 P 20110929
- US 201161555994 P 20111104
- US 201213628648 A 20120927
- CN 2012082476 W 20120929

Abstract (en)

[origin: US2013083769A1] Radio resources can be allocated in a manner avoiding a zero power problem by selecting one of two reference signals for control channel estimation, and transmitting the selected reference signal in a resource block (RB) or RB pair carrying the control channel. The two reference signals span common resource elements (REs) in the RB or RB pair. Alternatively, a zero power problem can be avoided by assigning modified WALSH codes to the two reference signals, and transmitting the two reference signals in the RB or RB pair carrying the control channel in accordance with their modified WALSH codes. The modified WALSH codes include complex constants having a non-zero phase difference with one another. A control channel can be evenly partitioned in accordance with a checkerboard partitioning technique.

IPC 8 full level

H04L 5/00 (2006.01); **H04W 72/04** (2009.01); H04L 25/02 (2006.01)

CPC (source: EP US)

H04L 5/0016 (2013.01 - EP US); **H04L 5/0023** (2013.01 - EP US); **H04L 5/0048** (2013.01 - EP US); **H04L 5/0053** (2013.01 - EP US); **H04L 25/0202** (2013.01 - US); **H04W 24/08** (2013.01 - US); **H04W 72/0446** (2013.01 - US); **H04W 72/23** (2023.01 - US); **H04W 72/53** (2023.01 - US); H04L 25/0226 (2013.01 - EP US)

Cited by

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

US 2013083769 A1 20130404; **US 9008035 B2 20150414**; CN 103843433 A 20140604; CN 103843433 B 20171229; CN 103843433 B9 20180223; CN 108200651 A 20180622; CN 108200651 B 20220325; EP 2761959 A1 20140806; EP 2761959 A4 20150225; EP 2761959 B1 20170621; US 10200984 B2 20190205; US 11026216 B2 20210601; US 2015181582 A1 20150625; US 2016119905 A1 20160428; US 2016345304 A1 20161124; US 2019174470 A1 20190606; US 9258815 B2 20160209; US 9408205 B2 20160802; WO 2013044870 A1 20130404

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US 201213628648 A 20120927; CN 2012082476 W 20120929; CN 201280048223 A 20120929; CN 201711435448 A 20120929; EP 12836982 A 20120929; US 201514642281 A 20150309; US 201514986480 A 20151231; US 201615225581 A 20160801; US 201916267044 A 20190204